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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,879	03/30/2004	Bin Wei	129545-1	2878
6147 7590 02/01/2010 GENERAL ELECTRIC COMPANY GLOBAL RESEARCH ONE RESEARCH CIRCLE PATENT DOCKET RM. BLDG. K1-4A50 NISKAYUNA, NY 12309				
			EXAMINER POPOVIC'S, ROBERT J	
			ART UNIT 1797	PAPER NUMBER
			NOTIFICATION DATE 02/01/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ldocket@crd.ge.com
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Office Action Summary

Application No.

10/708,879

Applicant(s)

WEI ET AL.

Examiner

/Robert James Popovics/

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-13 and 15-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-13 and 15-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

In view of the **Supplemental Appeal Brief** filed on **November 5, 2008**, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

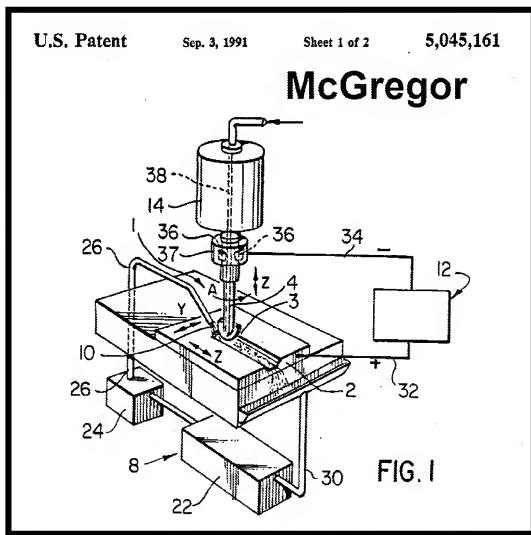
A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

**/Duane Smith/
Supervisory Patent Examiner
Art Unit 1797**

Claim Rejections - 35 USC § 103

Claims **1,3-13** and **15-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of **Abiko (US 5,281,788)** and/or **McGregor (US 5,045,161)** and/or **Hartwig (US 5,177,335)** and/or **Tanaka (US 5,739,497)** and/or **AAPA (Applicants' Admitted Prior Art)**.

McGregor, Tanaka and **Abiko** disclose electroerosion systems substantially as claimed.



U.S. Patent

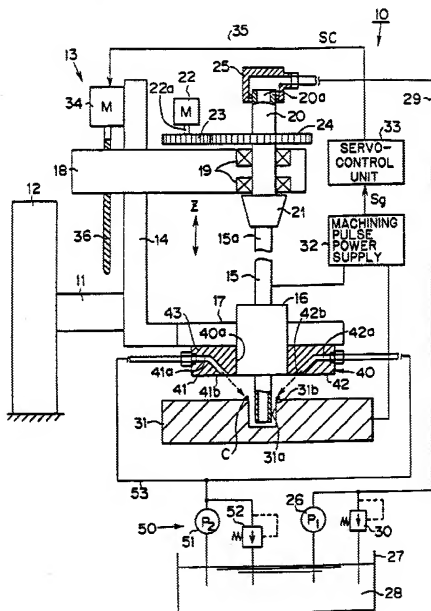
Jan. 25, 1994

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5,281,788

FIG. 1

Abiko



U.S. Patent

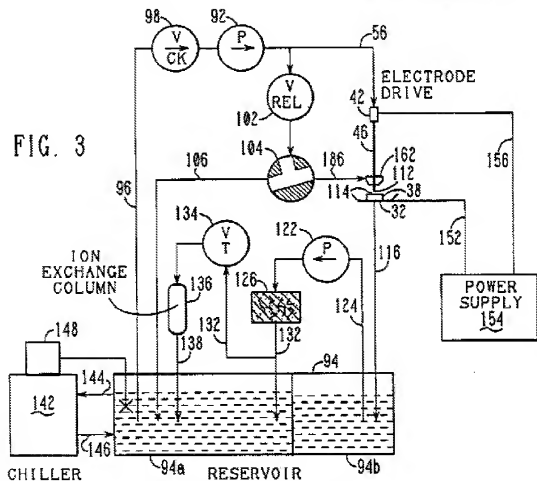
Apr. 14, 1998

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5,739,497

Tanaka

FIG. 3



AAPA teaches that it is known to flush metal chips from the bottom of the work tank and remove them with at least one filter.

AAPA

[0003] Electroerosion machining is also non-contact or minimum-contact machining process that can quickly shape any electrically conductive material regardless of the hardness or toughness of the material. In the electroerosion process, a substantial amount of material is removed from the metal workpiece. Metal chips are deposited at the bottom of a working tank and subsequently rolled by high pressure flushing. Without adequate filtration, these rolled chips can be pumped back into the machining zone and generate secondary discharge or arcing between the electrode and the workpiece, thereby affecting process stability and surface integrity as well as geometry accuracy.

[0004] At present, existing EDM-type filtration and flushing systems that are adopted for electroerosion machines do not have sufficient filtration systems associated therewith.

Claims 1,3-13 and 15-24 essentially differ from the prior art as defined by **McGregor, Abiko** and **AAPA** by specifying a second filter. **McGregor** discloses **flushing filtration** at column 4, lines 5-10. **Tanaka** discloses a two-stage filtration scheme employing units 126 and 136. **Hartwig** clearly discloses a **two-stage filtration process** employing **prefilter 28** in addition to the flushing filter conventionally employed with such units.

U.S. Patent

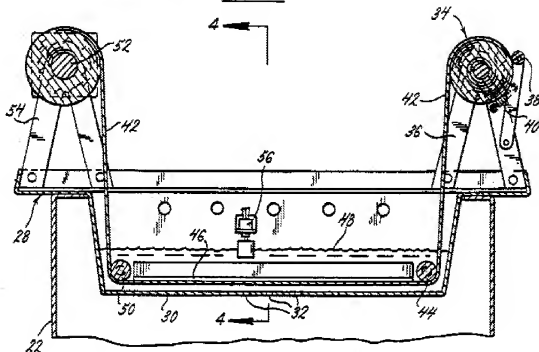
Jan. 5, 1993

Sheet 2 of 2

5,177,335

Hartwig

FIG. 3.



In view of the prefilter teaching of **Hartwig**, it would have been obvious to those skilled in the art at the time the invention was made to employ a two-stage filtration scheme in know systems of the prior art as exemplified and encompassed by **McGregor, Abiko, Tanaka** and **AAPA** in order to reduce down time associated with conventional filtration schemes as expressly taught by **Hartwig**.

Specification

The disclosure is objected to because of the following informalities: at paragraph "[0004]" should "adopted" be ~~adapted~~—?

Appropriate correction is required.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

This action is **NOT FINAL**.

Any inquiry concerning this communication should be directed to /Robert James Popovics/ at telephone number (571) 272-1164.

**/Robert James Popovics/
Primary Examiner
Art Unit 1797**